

CLAIMS

We Claim:

1. A slot holder, comprising:

a plurality of slot insertion members to hold a plurality of card edge slots having a plurality of pins extending from each of the plurality of card edge slots in alignment for insertion of the plurality of pins into a plurality of holes of a printed circuit board;

at least one grip attachment member connected to the plurality of slot insertion members to rigidly hold the plurality of slot insertion members in a fixed position; and

at least one grip member connected to the at least one grip attachment member to enable the holding and positioning of the slot holder.

2. The slot holder recited in claim 1, wherein the plurality of slot insertion members are inserted into a card slot having a plurality of electrical contact points contained in the card edge slot connected to the plurality of pins.

3. The slot holder recited in claim 1, wherein the at least one grip attachment member comprises at least two grip attachment members attached to opposite ends of each of the plurality of slot insertion members.

4. The slot holder recited in claim 3, wherein the at least one grip member comprises at least two grip members with each grip member of the at least two grip members attached to each of the at least two grip attachment members.

5. The slot holder recited in claim 4, wherein the at least two grip members are grasped to align the plurality of pins with the plurality of holes and are used to press the pins into the holes without bending any of the plurality of pins or tilting any of the plurality of card edge slots relative to the printed circuit board.

6. The slot holder recited in claim 5, wherein each slot insertion member of the plurality slot insertion members holds each card edge slot in position while the printed circuit board is passed over a wave solder machine to solder the plurality of pins to the printed circuit board.

7. The slot holder recited in claim 6, wherein each slot insertion member of the plurality slot insertion members further comprises at least one insertion point inserted into a card slot having a plurality of electrical contact points contained in the card edge slot connected to the plurality of pins, wherein said at least one insertion point is the only portion of each slot insertion member that extends into the card slot.

8. The slot holder recited in claim 7, wherein said at least one insertion point comprises at least two insertion points located at an opposite end of each of the plurality of grip insertion members.

9. The slot holder recited in claim 7, wherein said at least one insertion point comprises at a plurality of insertion points located distributed along each of the plurality

of grip insertion members.

10. The slot holder recited in claim 2, wherein said at least one grip attachment member limits the depth each slot insertion may be placed into the card slot.

11. A method of inserting a plurality of card edge slots having a plurality of pins extending from each of the plurality of card edge slots into a plurality of holes of a printed circuit board, comprising:

mounting each of the plurality of card edge slots onto a plurality of slot insertion members, wherein each slot insertion member is connected to at least one grip attachment member which is attached to a least one grip member, said slot insertion members to rigidly hold the plurality of slot insertion members in a fixed position; and

inserting the plurality of pins on the plurality of card edge slots into the plurality of holes in the printed circuit board using the at least one grip member.

12. The method recited in claim 11, wherein inserting the plurality of pins on the plurality of card edge slots into the plurality of holes in the printed circuit board using the at least one grip member further comprises:

aligning the plurality of pins on the plurality of card edge slots with the plurality of holes on the printed circuit board using the grip member; and

pressing on the grip member to insert the plurality of pins of the plurality of card edge slots into the plurality of holes of the printed circuit board until the card edge slot comes into contact with printed circuit board.

13. The method recited in claim 12, further comprising:

soldering the plurality of pins to the printed circuit board using a wave solder machine, wherein the plurality of grip insertion members holds the card edge slots and plurality of pins in place during said soldering.

14. The method recited in claim 13, wherein the at least one grip attachment member comprises at least two grip attachment members attached to a opposite end of each of the plurality of slot insertion members.

15. The method recited in claim 14, wherein the at least one grip member comprises at least two grip members with each grip member of the at least two grip members attached to each of the at least two grip attachment members.

16. The method recited in claim 15, wherein each slot insertion member of the plurality slot insertion members further comprises at least one insertion point inserted into a card slot having a plurality of electrical contact points contained in the card edge slot connected to the plurality of pins, wherein said at least one insertion point is the only portion of each slot insertion member that extends into the card slot.

17. The method recited in claim 16, wherein said at least one insertion point comprises at least two insertion points located at an opposite end of each of the plurality of grip insertion members.

18. The method recited in claim 17, wherein said at least one insertion point comprises at a plurality of insertion points located distributed along each of the plurality of grip insertion members.

19. The method recited in claim 12, wherein the depth of said mounting each of the plurality of card edge slots onto a plurality of slot insertion members is limited by the grip insertion member.

20. A slot holder, comprising:

a plurality of slot insertion members to hold a plurality of card edge slots having a plurality of pins extending from each of the plurality of card edge slots in alignment for insertion of the plurality of pins into a plurality of holes of a printed circuit board, wherein the plurality of slot insertion members are inserted into a card slot having a plurality of electrical contact points contained in the card edge slot connected to the plurality of pins;

at least two grip attachment members connected to the plurality of slot insertion members to rigidly hold the plurality of slot insertion members in a fixed position; and

at least two grip members connected to each grip attachment member to enable the holding and positioning of the slot holder.

21. The slot holder recited in claim 20, wherein the at least two grip members are grasped to align the plurality of pins with the plurality of holes and are used to press

the pins into the holes without bending any of the plurality of pins or tilting any of the plurality of card edge slots relative to the printed circuit board.

22. The slot holder recited in claim 21, wherein each slot insertion member of the plurality slot insertion members holds each card edge slot in position while the printed circuit board is passed over a wave solder machine to solder the plurality of pins to the printed circuit board.

23. The slot holder recited in claim 22, wherein each slot insertion member of the plurality slot insertion members further comprises at least one insertion point inserted into a card slot having a plurality of electrical contact points contained in the card edge slot connected to the plurality of pins, wherein said at least one insertion point is the only portion of each slot insertion member that extends into the card slot.